



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

www.uspto.gov		
ATTORNEY DOCKET NO.	CONFIRMATION NO.	

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR Lin-Ying Hu 612.41242X00 10/091,454 03/07/2002 1395 EXAMINER 20457 04/24/2006 7590 ANTONELLI, TERRY, STOUT & KRAUS, LLP ALAVI, AMIR 1300 NORTH SEVENTEENTH STREET ART UNIT PAPER NUMBER **SUITE 1800** ARLINGTON, VA 22209-3873 2624

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	
		10/091,454	HU, LIN-YING	
	Office Action Summary	Examiner	Art Unit	
		Amir Alavi	2624	
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the	ocorrespondence address	
WHIC - Exter after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATES and the may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATE (6(a). In no event, however, may a reply be ill apply and will expire SIX (6) MONTHS fro cause the application to become ABANDO.	ON. Itimely filed om the mailing date of this communication. NED (35 U.S.C. § 133).	
Status				
2a) <u></u> □	Responsive to communication(s) filed on <u>07 Ma</u> This action is FINAL . 2b) This Since this application is in condition for allowan closed in accordance with the practice under E.	action is non-final. ce except for formal matters, p		
Dispositi	on of Claims			
5)⊠ 6)□ 7)□ 8)□ Applicati	Claim(s) 1-14 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) 1-14 is/are allowed. Claim(s) is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or on Papers The specification is objected to by the Examiner	election requirement.		
_	The drawing(s) filed on 30 May 2002 is/are: a) Applicant may not request that any objection to the d Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the Exa	rawing(s) be held in abeyance. Son is required if the drawing(s) is c	See 37 CFR 1.85(a). Objected to. See 37 CFR 1.121(d).	
Priority u	nder 35 U.S.C. § 119			
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
2) 🔲 Notice 3) 🔯 Inform	(s) of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date 20020307.	4) Interview Summal Paper No(s)/Mail (5) Notice of Informal 6) Other:	ry (PTO-413) Date Patent Application (PTO-152)	

Application/Control Number: 10/091,454 Page 2

Art Unit: 2624

DETAILED ACTION

This application is in condition for allowance except for the following formal matters:

- Applicant is reminded of the proper language and format for an abstract of the disclosure.
- The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.
- The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.
- > Prosecution on the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.
- A shortened statutory period for reply to this action is set to expire TWO
 MONTHS from the mailing date of this letter.

Application/Control Number: 10/091,454

Art Unit: 2624

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The present invention is directed towards a method for gradually deforming an initial realization formed from measurements or observations and defining the distribution of a set of objects in a zone of a heterogeneous medium such as a geologic structure, generated by simulation of an object type stochastic model, the objects being distributed in the zone according to a Poisson point process in form of figurative points with a point density $\lambda(x)$ varying according to their position (x) in the zone. The sole independent claim identifies the uniquely distinct feature "for gradually modifying a uniform random vector according to a gradual deformation procedure, so as to obtain gradual migration of each object and consequently gradual change in the distribution of the objects in the zone, until a final realization best adjusted to parameters relative to the structure of the medium, such as hydrodynamic parameters, is obtained, which gives a realistic representation of the configuration of the objects in the modeled heterogeneous medium". The closest prior art, Irie et al. (USPN 5,555,320) disclose, pattern recognition system with improved recognition rate using nonlinear transformation; while Kamayashi (USPN 5,285,395) discloses, distribution generation system, and optimization system that adopts distribution generation system, either singularly or in combination, fail to anticipate or render the above underlined limitation obvious.

Contact Information

➤ Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amir Alavi whose telephone number is 571-272-7386. The examiner can normally be reached on Mon-Thu.. 8:00 am thru 6:30pm.

- ➤ If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Bella C. Matthew can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AA Technology Division 2624 21 April 2006



Page 4